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| APPLICATION NO.        | FILING DATE                      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO       |  |
|------------------------|----------------------------------|----------------------|---------------------|-----------------------|--|
| 10/716,449             | 11/20/2003                       | Brian Peter Arness   | 839-1505            | 6630                  |  |
| 30024 75               | 90 06/30/2005                    | •                    | EXAMINER            |                       |  |
| NIXON & VANDERHYE P.C. |                                  |                      | KERSHTEYN, IGOR     |                       |  |
| ARLINGTON,             | LEBE ROAD, 11TH FLOO<br>VA 22203 | К                    | ART UNIT            | ART UNIT PAPER NUMBER |  |
| ,                      |                                  |                      | 3745                | 3745                  |  |

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|   | Application No.   | Applicant(s)   |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
|   | 10/716,449  | ARNESS ET AL.  |  |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |  |  |
|   | Igor Kershteyn  | 3745   |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | ears on the cover sheet with the c  | orrespondence address  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | ely filed<br>will be considered timely.<br>the mailing date of this communication.<br>O (35 U.S.C. § 133). |  |  |  |  |  |
| Status  |   |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on  | _•  |  |  |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |  |  |  |  |  |  |
| 3) Since this application is in condition for allowar   | nce except for formal matters, pro  | secution as to the merits is   |  |  |  |  |  |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11, 45  | 3 O.G. 213.  |  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |  |
| 4) Claim(s) 1-17 is/are pending in the application.   | 4)⊠ Claim(s) 1-17 is/are pending in the application.  |  |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw   | vn from consideration.  |  |  |  |  |  |  |
| 5)⊠ Claim(s) <u>7-17</u> is/are allowed.  |   |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-3</u> is/are rejected.  |   |  |  |  |  |  |  |
| 7) Claim(s) <u>4-6</u> is/are objected to.  |   |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | election requirement.   |  |  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |  |
| 9) The specification is objected to by the Examine  | r.  |  |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>20 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.   |   |  |  |  |  |  |  |
| Applicant may not request that any objection to the   | drawing(s) be held in abeyance. See   | 37 CFR 1.85(a).  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correcti   | on is required if the drawing(s) is obj   | ected to. See 37 CFR 1.121(d).   |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori   | s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).   | on No d in this National Stage   |  |  |  |  |  |
| Attachment(s)   |   |  |  |  |  |  |  |
| 1) X Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) ☐ Interview Summary (<br>Paper No(s)/Mail Da   |  |  |  |  |  |  |
| Paper No(s)/Mail Date <u>03/09/2004</u> .   |   | atent Application (PTO-152)  |  |  |  |  |  |

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Holmes (4,274,805).

In figures 1-3, Holmes teaches a retention system for nozzles 14 of a turbine, comprising: a nozzle retention ring 46 for disposition about an axis of the turbine; a plurality of circumferentially adjacent nozzle segments 14 carried by said nozzle retention ring 46; and anti-rotation pins 48 extending in generally axial directions and engaging between said retention ring 46 and said nozzle segments 14, respectively, to restrain movement of the nozzle segments 14 in a rotational direction about the turbine axis.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Walker (4,883,405).

In figures 1 and 2, Walker teaches a retention system for nozzles of a turbine, comprising: a nozzle retention ring 14 for disposition about an axis of the turbine; a plurality of circumferentially adjacent nozzle segments 12 carried by said nozzle retention ring 14; and anti-rotation pins 20 extending in generally axial directions and

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engaging between said retention ring 14 and said nozzle segments 12, respectively, to restrain movement of the nozzle segments 12 in a rotational direction about the turbine axis, said retention ring 14 includes an axially facing surface (not numbered), said anti-rotation pins 20 being exposed through said surface and at least one retention plate segment 22 overlying the axially facing surface, precluding removal of the pins 20 in an axially direction, said retention plate segment 20 comprises one of a plurality of arcuate retention plate segments arranged in an annular array thereof about the axis.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Boyd et al. (5,591,003).

In figures 1 and 4A, Boyd et al. teach A retention system for nozzles of a turbine 2, comprising: a nozzle retention ring 34A for disposition about an axis of the turbine 2; a plurality of circumferentially adjacent nozzle segments 10" carried by said nozzle retention ring 34A; and anti-rotation pins 38 extending in generally axial directions and engaging between said retention ring 34A and said nozzle segments 10", respectively, to restrain movement of the nozzle segments10" in a rotational direction about the turbine axis.

## Allowable Subject Matter

Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 7-17 are allowed.

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#### Prior Art

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consist of six patents.

Noren (3,423,071) is cited to show a turbine vane retention system including a retention ring and a pin but fails to show a nozzle segment.

Hansel et al. (4,815,933) is cited to show a turbine vane retention system including a retention ring, a nozzle segment and a pin.

Ackerman et al. (5,211,536) is cited to show a turbine vane retention system including a retention ring, a nozzle segment and a pin.

Lenahan et al. (5,224,822) is cited to show a turbine vane retention system including a retention ring, a nozzle segment and a pin.

Norton et al. (5,459,995) is cited to show a turbine vane retention system including a retention ring, a nozzle segment and a pin.

Papageorgiou et al. (5,618,161) is cited to show a turbine vane retention system including a retention ring and a nozzle segment but fails to show a pin.

### Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is (571)272-4817. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on **(571)272-4820**. The fax number is **(703)** 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

**IK** June 22, 2005

Igor Kershteyn Patent examiner. Art Unit 3745